

US EPA RECORDS CENTER REGION 5



466405

Monthly Oversight Report 57
44728 AES [46526 RAC]
ACS NPL Site
Griffith, Indiana
September 3, 2005 – September 30, 2005



BLACK & VEATCH

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Black & Veatch Special Projects Corp.

USEPA/AES
American Chemical Service, Inc. RAO (0057-ROBE-05J7)

BVSPC Project 44728
BVSPC File C.3
October 14, 2005

Mr. Kevin Adler
U.S. Environmental Protection Agency
77 W. Jackson Boulevard (SR-6J)
Chicago, Illinois 60604-3590

Subject: Monthly Oversight Summary Report
No. 57 for September 2005

Dear Mr. Adler:

Enclosed is the Monthly Oversight Summary Report No. 57 for September 2005 for the American Chemical Service, Inc. Superfund Site in Griffith, Indiana.

If you have any questions, please call (312-683-7856) or email (campbellm@bv.com).

Sincerely,

BLACK & VEATCH Special Projects Corp.

Larry M. Campbell, P.E.
Site Manager

Enclosure

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Monthly Oversight Summary Report No. 57
ACS Superfund Site
TO 057, 44728.238 AES [WA57, 46526.238 RAC]

Reporting Period: Month of September (September 3, 2005 – September 30, 2005)
BVSPC O/S Dates: September 19, 22, & 27, 2005 (Messrs. Gailey and Campbell)

Personnel Summary Affiliation	No. of Personnel	Responsibility
Montgomery Watson Harza	3	Respondent's General Contractor
U.S. Environmental Protection Agency	1	Federal Regulatory Agency
Indiana Department of Environmental Management	1	State Regulatory Agency
Black & Veatch Special Projects Corp.	1	USEPA Oversight Contractor
Austgen	1	General Contractor
Microbac	1	GWTP Sampling Contractor

Construction Activities

Major Activities:

- Montgomery Watson Harza continued operating the groundwater treatment plant, the in-situ soil vapor extraction systems, and the air sparge systems.
- Montgomery Watson Harza conducted the semiannual groundwater monitoring well sampling and the annual residential well sampling events.
- Montgomery Watson Harza completed development and sampling of the temporary wells in the lower aquifer investigation area.
- Microbac collected samples from the groundwater treatment plant for routine process monitoring.
- Montgomery Watson Harza held a construction coordination meeting on September 22.
- U.S. Environmental Protection Agency, Indiana Department of Environmental Management, and Montgomery Watson Harza conducted the Final Inspection of the site on September 22.

Activities Performed:

Montgomery Watson Harza (MWH) reported (October 7) that the groundwater treatment plant (GWTP) was operational 100% of the time (all 30 days) in September, processing 1,189,084 gallons of groundwater at average rates of 25 to 40 gpm. MWH reported that groundwater was being pumped to the GWTP from all trench and well sources. Microbac collected samples from the GWTP for routine process monitoring.

MWH continued to operate the On-Site Containment Area (ONCA) Still Bottoms Pond Area (SBPA) and Off-Site Containment Area (OFCA) in-situ soil vapor extraction (ISVE) systems and the OFCA and SBPA air sparge systems.

MWH reported that thermox 1 operated for all of the 30 days in September, processing 1,000 cfm of vapors from the ONCA SBPA ISVE system, collecting vapors from 23 of the 46 ISVE wells.

MWH reported that thermox 2 operated for 24.5 of the 30 days in September, processing 2,000 cfm of vapors collected from all 42 OFCA ISVE wells and aeration tank T102. MWH reported that thermox 2 was offline for about 5 days for maintenance activities. MWH reported that it cleaned the scrubber packing, replaced a pH probe, and cleaned the quench nozzles. MWH reported that operation of the GWTP continued while thermox 2 was out of service by routing the vapors from aeration tank T102 through thermox 1.

MWH reported that it pumped 30 gallons of product from five ISVE wells in the SBPA on September 14. MWH reported that it used a special pump to remove 60 gallons of the more viscous product from well SVE61 on September 8 and 14. The product was manually transferred to the oil holding tank T6 in the GWTP.

MWH reported that the planned upgrades to the SBPA ISVE system are in progress, with approximately 80% of the work in the GWTP completed. Upgrade work has not been started in the SBPA blower shed.

MWH reported that it used Austen to restore the disturbed ground surface around the lower aquifer investigation wells and also restore the pathways leading to the wells.

Observed MWH develop lower aquifer investigation wells LA14, LA15, and OW1 using a Grundfos pump, pumping the extracted water to the GWTP.

Observed MWH conduct water level measurements in monitoring wells, piezometers, and pond; conduct groundwater sampling of the lower aquifer investigation wells; and conduct semiannual groundwater monitoring well sampling. MWH reported that it also conducted the annual residential well sampling.

MWH reported that ACS had not reported a recurrence of odors in its break room on the SBPA. MWH reported that ACS production activity has increased and it has begun 7-day per week work activity at the site.

MWH conducted a construction coordination meeting on 1 day during the reporting period (September 22). The U.S. Environmental Protection Agency, Indiana Department of Environmental Management, and MWH conducted the Final Inspection of the ACS site on September 22, following the construction coordination meeting. Participants reviewed the punch list items developed during the Pre-Final Inspection conducted on September 23, 2004, and concluded that all items had been satisfactorily completed. BVSPC attended these meetings.

Because of the lack of field activity, weekly reports are not attached. Weekly reports will be prepared in the future if there are sufficient field activities to warrant such reporting. However, correspondence, log book notes and photographs of the daily activities are attached. BVSPC conducted oversight of the field activities on September 19, 22, and 27.

Topics of Concern: None

Concern Resolution: None

Upcoming Activities:

- MWH to continue operating the GWTP and the OFCA and ONCA SBPA ISVE and air sparge systems.
- MWH to complete upgrades to the SBPA ISVE system.
- MWH to monitor odors in the ACS break room.
- MWH and Global to remediate the leaking tubes in thermox 2 heat exchanger.
- MWH to continue pumping product from selected ONCA SBPA dual phase extraction wells.
- MWH to complete development of lower aquifer extraction well EW02 and conduct the pumping test.
- MWH to conduct post-application sampling of the third full-scale ISCO event.
- MWH will continue weekly construction coordination meetings at the site when field activities warrant such meetings.
- MWH will continue monthly O&M meetings to report on operation of active treatment systems.

Signature: Larry Campbell

Date: October 13, 2005

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**SITE STATUS MEETING MINUTES
FOR SEPTEMBER 22, 2005 MEETING
AMERICAN CHEMICAL SERVICE, NPL SITE
GRIFFITH, INDIANA**

MEETING DATE: Thursday, September 22, 2005

MEETING TIME: 2:00 p.m.

MEETING LOCATION: ACS Site

ATTENDEES: Kevin Adler – U.S. EPA
Larry Campbell – Black & Veatch
Prabhakar Kasarabada - IDEM
Peter Vagt – MWH
Todd Lewis – MWH
Chris Daly – MWH
Lee Orosz – MWH

TOPICS:

SITE STATUS

General Site Health and Safety

There have been no health and safety issues since the last meeting on September 2. The number of mosquitoes and wasps has subsided. However, bug spray is still recommended for personnel who will be working outside. Standard safety procedures were followed while lifting a heavy, carbon steel pipe for the SBPA ISVE Upgrade on September 21.

Groundwater Treatment Plant (GWTP) Status

No issues since the last meeting on September 2.

Off-Site Area/SBPA ISVE Systems

No issues regarding operation of the ISVE systems since the last meeting on September 2.

MWH has begun the implementation of the system upgrades to the SBPA system. Approximately 80 percent of the work at the GWTP has been completed. Work has yet to be started in the blower shed.

Interaction with ACS Facility

The ACS facility is changing their work schedule to 7 days a week and has recently hired several new personnel. MWH will coordinate an orientation for the new ACS employees as an introduction to the site operations that MWH performs.

Lower Aquifer Investigation – Phase 2

The area near the lower aquifer investigation wells was regraded and mulch was laid down to enhance access to the area.

The well development for the remaining lower aquifer investigation wells (LA-14, LA-15, and OW-1) commenced on Wednesday, September 21. Well LA-15 was completed during the morning of September 22, and development was begun at LA-14. During development of these two wells, the two pumps utilized for the process burned out. A replacement pump is being ordered. MWH anticipates that well development will continue through September 23.

Final Inspection

The final inspection of the ACS Site was conducted following this meeting. Details of that meeting are under separate cover.

LOOK AHEAD

Field Events

- Lower Aquifer Phase 2 Event – anticipated schedule
 - Well development: September 21-23
 - Well sampling: September 26-28
 - Pump test: currently scheduled for October 10-14 (likely to be postponed)
- Chemical Oxidation, Third Full-Scale Event – anticipated schedule
 - Post-Application Sampling: October 3-7
- Groundwater Monitoring
 - September 2005 Groundwater Monitoring: September 19-23
 - Annual Residential Well Sampling: September 23-27

Health & Safety Look Ahead

- Due to increased activity by the ACS facility, rail traffic near the site is anticipated to increase. Site personnel should maintain alert levels when working near the railway.

Future Meetings

- Monthly Site Meeting – Friday, October 7, 2005, 10 a.m. at MWH Chicago office.

Attachments

Schedule of Upcoming Field Activities

CAD/PJV

J:\209\0602 ACS PM\Meetings\Meeting Minutes 2005\ACS Meeting Minutes 09-22-05.doc

2005

Aug 05	21	22	23	24	25	26	27
	Lower Aquifer Well Development						
	28	29	30	31	1	2	3
Sep 05	4	5	6	7	8	9	10
	Labor Day						
	11	12	13	14	15	16	17
	18	19	20	21	22	23	24
	September 2005 Groundwater Monitoring and Residential Well Sampling Event						
	25	26	27	28	29	30	1
	Lower Aquifer Investigation Sampling						
	September 2005 Residential Well						
Oct 05	2	3	4	5	6	7	8
	Third Full-Scale ChemOx Application - Post-Application Sampling						
	9	10	11	12	13	14	15
	Lower Aquifer Pump Test (preliminary schedule - may be postponed)						
	16	17	18	19	20	21	22
	23	24	25	26	27	28	29
	30	31	1	2	3	4	5

**CONSTRUCTION COMPLETION FINAL INSPECTION
MINUTES AND PUNCH LIST
SEPTEMBER 22, 2005
AMERICAN CHEMICAL SERVICE, NPL SITE
GRIFFITH, INDIANA**

INSPECTION DATE: Thursday, September 22, 2005

MEETING TIME: 3:30 p.m.

MEETING LOCATION: ACS Site

PARTICIPANTS: Kevin Adler – U.S. EPA
Prabhakar Kasarabada – IDEM
Larry Campbell – BVSPC
Todd Lewis – MWH
Pete Vagt – MWH
Chris Daly – MWH
Lee Orosz – MWH

TOPICS

The Construction Completion Final Inspection was conducted at the site beginning at 3:30 p.m. The participants are listed above.

During the meeting, the group reviewed the punch list that was created during the Pre-Certification Inspection conducted on September 23, 2004. The punch list items are listed in the attached table. The table also lists the corrective actions taken by MWH in response to each item. Editorial comments received during the meeting have been incorporated.

The inspection was completed at approximately 4:00PM.

CAD/PJV
J:\209\0602 ACS PM\Final Inspection Minutes.doc

Capital Construction Completion Punch List Completion
ACS NPL Site - Griffith, Indiana

Task ID	Punch List Item ¹	Completion Summary
1.e General Groundwater Remediation	1. Complete restoration of the property at 1002 Reder Road. [as part of the First Full-Scale Chemical Oxidation event]	Restoration at 1002 Reder Road was completed in October 2004. Restoration consisted of smoothing ruts and torn-up areas, seeding areas with grass. Similar restoration activities were performed following subsequent injection events.
	2. Complete chemical oxidation injection at the remaining 65 points of the First Full-Scale Event.	The Phase 1 chemical oxidation application was completed on September 25, 2004.
	3. Demobilize equipment from First Full-Scale Chemical Oxidation Event.	The chemical oxidation injection equipment was demobilized from the site on September 25, 2004.
	4. Complete indoor air intrusion follow-up work at the residence at 1002 Reder Road.	Soil vapor sampling was conducted in August 2004 and documented in a February 7, 2005 letter report. A Soil Vapor Mitigation System was installed at the residence in February 2005. Indoor air sampling was conducted in June 2005. Sampling results show that no further action is required.
5.d Final On-Site Cover	1. Dress up the edges of the cover with aggregate to assist in directing stormwater to the catch basins and protect the edges of the cover.	INDOT Aggregate #53 was placed in along the cover in selected areas on October 8, 2004.
	2. Place regular asphalt around select catch basins around the perimeter of the cover to assist in directing stormwater to the catch basins.	Asphalt was placed around the select catch basins on October 8, 2004.
	3. Install a asphalt curb along certain locations at the south perimeter of the cover to assist in directing stormwater to the catch basins	The curb was installed at the select locations on October 8, 2004.
	4. Evaluate if additional work needs to be completed to address the areas where stormwater ponds on the cover.	Due to the relatively small and shallow nature of the ponding areas and the potential for damaging the newly installed cover repair them, no action is
	5. Expand the fencing to include more ISVE wells.	The fencing on the east side of the truck road was completed in March 2005.
	6. Mark the allowed truck route on the cover.	The extents of the truck route were painted on the asphalt on October 21, 2004.

Note:

¹ Punch list items identified by the EPA and IDEM during the Pre-Final Inspection on September 23, 2004

Remedial Progress Report	September-05	Report Date: 10/6/2005																																										
GWTP & Dewatering																																												
The GWTP was operational for 30 days out of 30 days in September (100%). Total Gallons treated = 1,189,084 gallons since 8/26/05 (28 days).		<u>Tables, Graphs & Figures</u> Table - Effluent Summary Graphs - Off-Site Dewatering Graphs - SBPA Dewatering																																										
SBPA ISVE System																																												
System was operational 30 out of 30 days in September (100%). System monitoring was conducted on 9/29/05. The next monitoring event is scheduled for 10/20/05.		Active Wells (23 of 46 total) <table border="1"> <tr><td>SVE-43</td><td>SVE-67</td></tr> <tr><td>SVE-45</td><td>SVE-68</td></tr> <tr><td>SVE-47</td><td>SVE-70</td></tr> <tr><td>SVE-48</td><td>SVE-71</td></tr> <tr><td>SVE-55</td><td>SVE-74</td></tr> <tr><td>SVE-56</td><td>SVE-75</td></tr> <tr><td>SVE-57</td><td>SVE-76</td></tr> <tr><td>SVE-58</td><td>SVE-83</td></tr> <tr><td>SVE-59</td><td>SVE-85</td></tr> <tr><td>SVE-60</td><td>SVE-86</td></tr> <tr><td>SVE-63</td><td>SVE-87</td></tr> <tr><td>SVE-64</td><td></td></tr> </table>	SVE-43	SVE-67	SVE-45	SVE-68	SVE-47	SVE-70	SVE-48	SVE-71	SVE-55	SVE-74	SVE-56	SVE-75	SVE-57	SVE-76	SVE-58	SVE-83	SVE-59	SVE-85	SVE-60	SVE-86	SVE-63	SVE-87	SVE-64																			
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Data presented here is for informational purposes only. Not all data presented in this report has been validated.																																												

Table
Summary of Effluent Analytical Results
Groundwater Treatment System
American Chemical Service NPL Site
Griffith, Indiana

Event Date	Month 98 7/12/2005	Month 99 8/15/2005	Month 100 9/13/2005	Effluent Limits	Lab Reporting Limits
pH	7.17 /J	7.66	7.55	6-9	none
TSS	6.00	NS	NS	30	10
BOD	< 2 / UJ	NS	NS	30	2
Arsenic	6.3 B/	NS	NS	50	3.4
Beryllium	ND	NS	NS	NE	0.2
Cadmium	ND	NS	NS	4.1	0.3
Manganese	9.4 B/UB	NS	NS	NE	10
Mercury	ND	NS	NS	0.02 (w/DL = 0.64)	0.64
Selenium	ND	NS	NS	8.2	4.3
Thallium	ND	NS	NS	NE	5.7
Zinc	ND	NS	NS	411	1.2
Benzene	0.50 U/	0.50 U/	0.50 U/	5	0.5
Acetone	2.5 U/	2.5 U/	2.5 U/	6,800	3
2-Butanone	2.5 U/	2.5 U/	2.5 U/	210	3
Chloromethane	0.3 J/ J	0.50 U/	0.50 U/	NE	0.5
1,4-Dichlorobenzene	0.50 U/	0.50 U/	0.50 U/	NE	0.5
1,1-Dichloroethane	0.50 U/	0.50 U/	0.50 U/	NE	0.5
cis-1,2-Dichloroethene	0.50 U/	0.50 U/	0.50 U/	70	0.5
Ethylbenzene	0.50 U/	0.50 U/	0.50 U/	34	0.5
Methylene chloride	0.50 U/	0.50 U/	0.44 J/	5	0.6
Tetrachloroethene	0.50 U/	0.50 U/	0.50 U/	5	0.5
Trichloroethene	0.50 U/	0.50 U/	0.50 U/	5	0.5
Vinyl chloride	0.50 U/	0.50 U/	0.50 U/	2	0.5
4-Methyl-2-pentanone	ND /UJ	2.5 U/	2.5 U/	15	3
bis (2-Chloroethyl) ether	ND	NS	NS	9.6	9.6
bis(2-Ethylhexyl) - phthalate	ND	NS	NS	6	6
4 - Methylphenol	ND	NS	NS	34	10
Isophorone	ND	NS	NS	50	10
Pentachlorophenol	ND	NS	NS	1	1
PCB/Aroclor-1016	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1221	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.92*
PCB/Aroclor-1232	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1242	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1248	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1254	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5
PCB/Aroclor-1260	ND	NS	NS	0.00056 (w/DL = 0.1 to 0.9)	0.5

Notes:

Bolded result indicates a exceedence of the discharge limit
pH data is expressed in S.U.
Metals, VOC, SVOC and PCB data is expressed in ug/L.
ND = Not detected
NS = This analyte was not sampled or analyzed for
NE = No effluent limit established.
DL = Detection limit
* = Approved SW-846 method is incapable of achieving effluent limit.

DRAFT VERSION

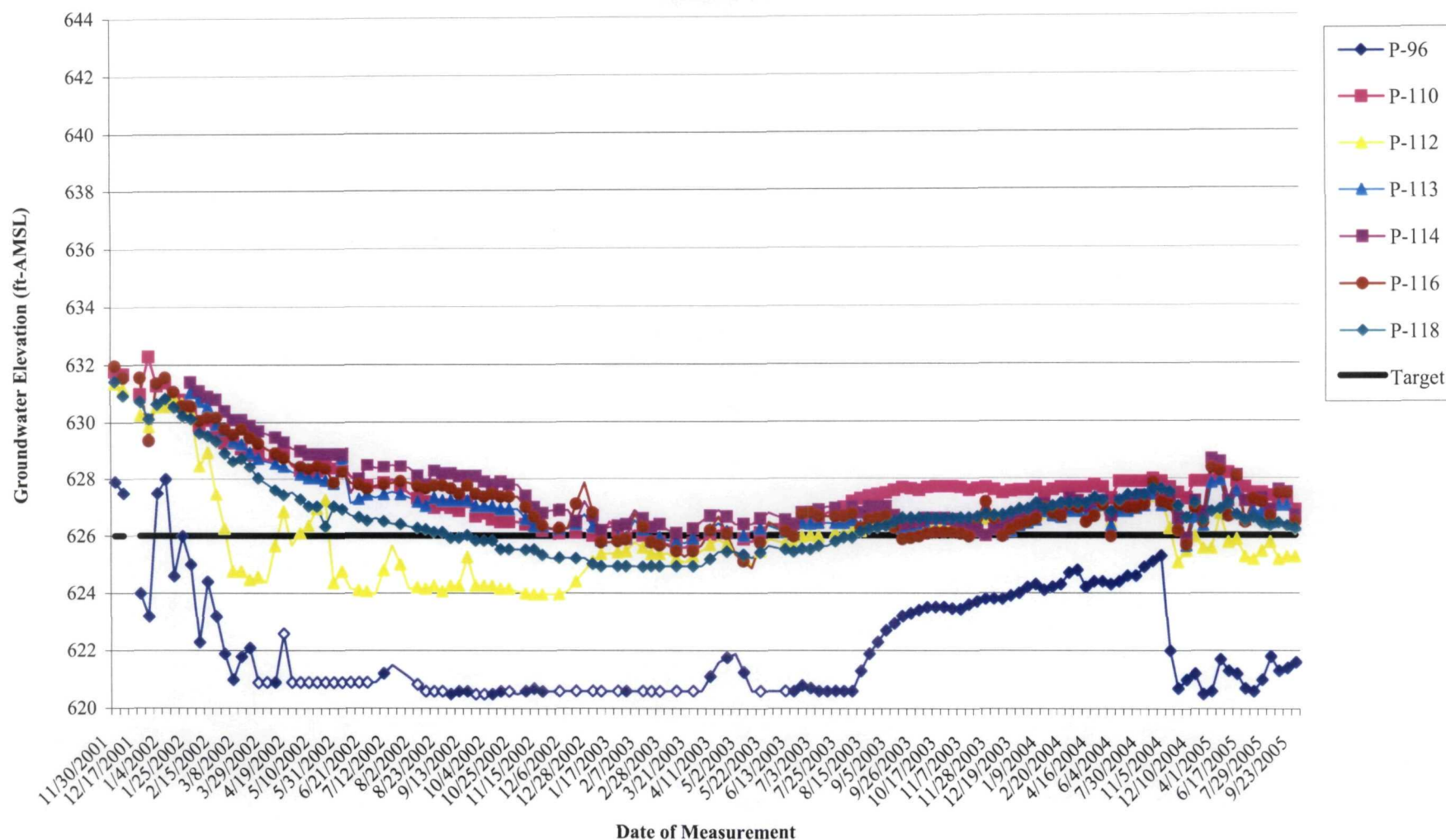
For Informational Purposes Only

Not all data presented here has been validated
Notes and suffix definitions have not been updated.

Suffix Definitions:

/ = Data qualifier added by laboratory
/_ = Data qualifier added by data validator
J = Result is estimated
B = Compound is also detected in the blank
UJ = Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value
JB = Result is detected below the reporting limit and is an estimated concentration.
The compound is also detected in the method blank resulting in a potential high bias
UB = Compound or analyte is not detected at or above the indicated concentration due to blank contamination
UBJ = Analyte is not detected at or above the indicated concentration due to blank contamination, however the calibration was out of range. Therefore the concentration is estimated.

Figure 2
Off-Site Water Level Status - Piezometers
Groundwater Monitoring
ACS NPL Site
Griffith, Indiana



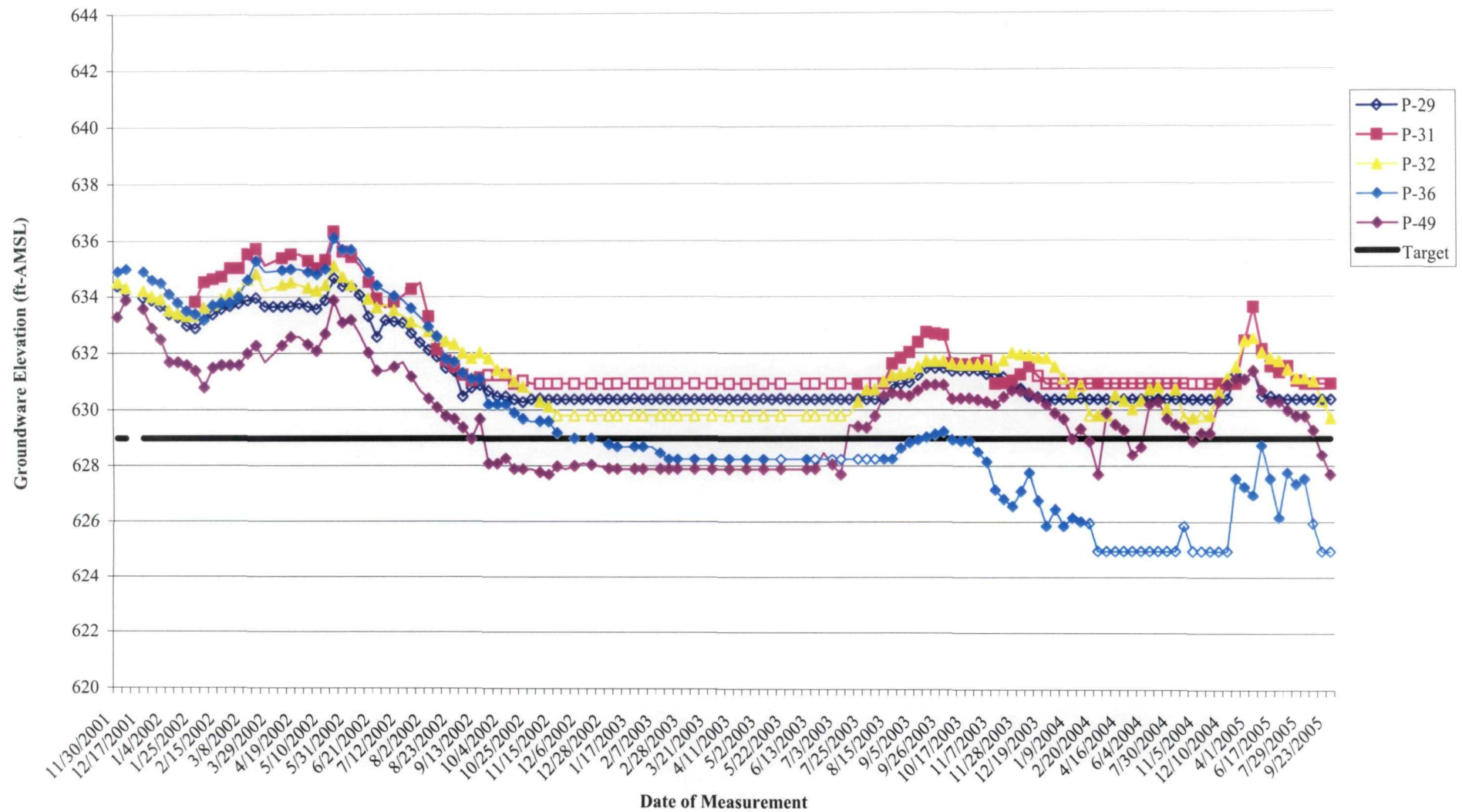
Note:

Hollow points represent dry piezometers
 (data used for graphing purposes only). The bottom elevation of the piezometers may vary due to silting

ALC/jmf

J:/209/0603/0301/BWES and Dewatering Data/September Tables and Figures.xls/Off-Site Chart

Figure 1
SBPA Water Level Status
ACS NPL Site
Griffith, Indiana



Note:

Hollow points represent dry piezometers (data used for graphing purposes only).

The bottom elevation of the piezometers may vary due to silting of the well or removal of silt.

ALC/jmf/CAD

J:/209/0603/0301/BWES Data/September Tables and Figures.x

Table 3
SBPA and Off-Site ISVE System Results
for Method TO-14 (VOCs) - September 2005
American Chemical Service
Griffith, Indiana

Compounds	Units	Sampled 8/12/2005			
		SBPA ISVE		Off-Site ISVE	
1,1,1-Trichloroethane	ppbv	31,000		42,000	
1,1,2,2-Tetrachloroethane	ppbv	ND	U	ND	U
1,1,2-Trichloroethane	ppbv	ND	U	240	J/J
1,1-Dichloroethane	ppbv	3,700		5,400	
1,1-Dichloroethene	ppbv	3,200		1,100	
1,2-Dichloroethane	ppbv	640		1,400	
1,2-Dichloropropane	ppbv	590		380	J/J
2-Butanone (Methyl Ethyl Ketone)	ppbv	1,900		15,000	
2-Hexanone	ppbv	ND	U	ND	U
4-Methyl-2-pentanone	ppbv	2,400		6,700	
Acetone	ppbv	4,800		19,000	
Benzene	ppbv	11,000		28,000	
Bromodichloromethane	ppbv	ND	U	ND	U
Bromoform	ppbv	ND	U	ND	U
Bromomethane	ppbv	ND	U	ND	U
Carbon Disulfide	ppbv	650	J/J	1,200	J/J
Carbon Tetrachloride	ppbv	ND	U	ND	U
Chlorobenzene	ppbv	ND	U	ND	U
Chloroethane	ppbv	540		ND	U
Chloroform	ppbv	12,000		3,700	
Chloromethane	ppbv	ND	U	270	J/J
cis-1,2-Dichloroethene	ppbv	44,000		4,100	
cis-1,3-Dichloropropene	ppbv	ND	U	ND	U
Dibromochloromethane	ppbv	ND	U	ND	U
Ethyl Benzene	ppbv	19,000		17,000	
m,p-Xylene	ppbv	94,000		72,000	
Methylene Chloride	ppbv	9,600		41,000	
o-Xylene	ppbv	44,000		24,000	
Styrene	ppbv	ND	U	ND	U
Tetrachloroethene	ppbv	55,000		32,000	
Toluene	ppbv	110,000		140,000	
trans-1,2-Dichloroethene	ppbv	ND	U	ND	U
trans-1,3-Dichloropropene	ppbv	ND	U	ND	U
Trichloroethene	ppbv	27,000		25,000	
Vinyl Chloride	ppbv	3,400		410	J/J
Total	ppbv	478,420		479,900	
Total	lb/hr	9.513		10.497	

Notes:

NC - Not calculated

ND - Non-detect

ppbv - parts per billion volume

lb/hr - pounds per hour

8/12/05 VOCs in lb/hr calculated based on Offsite: 1394 scfm, 80 degrees Fahrenheit (8/12/05)

On-site: 1250 scfm, 110 degrees Fahrenheit (8/12/05)

Qualifiers:

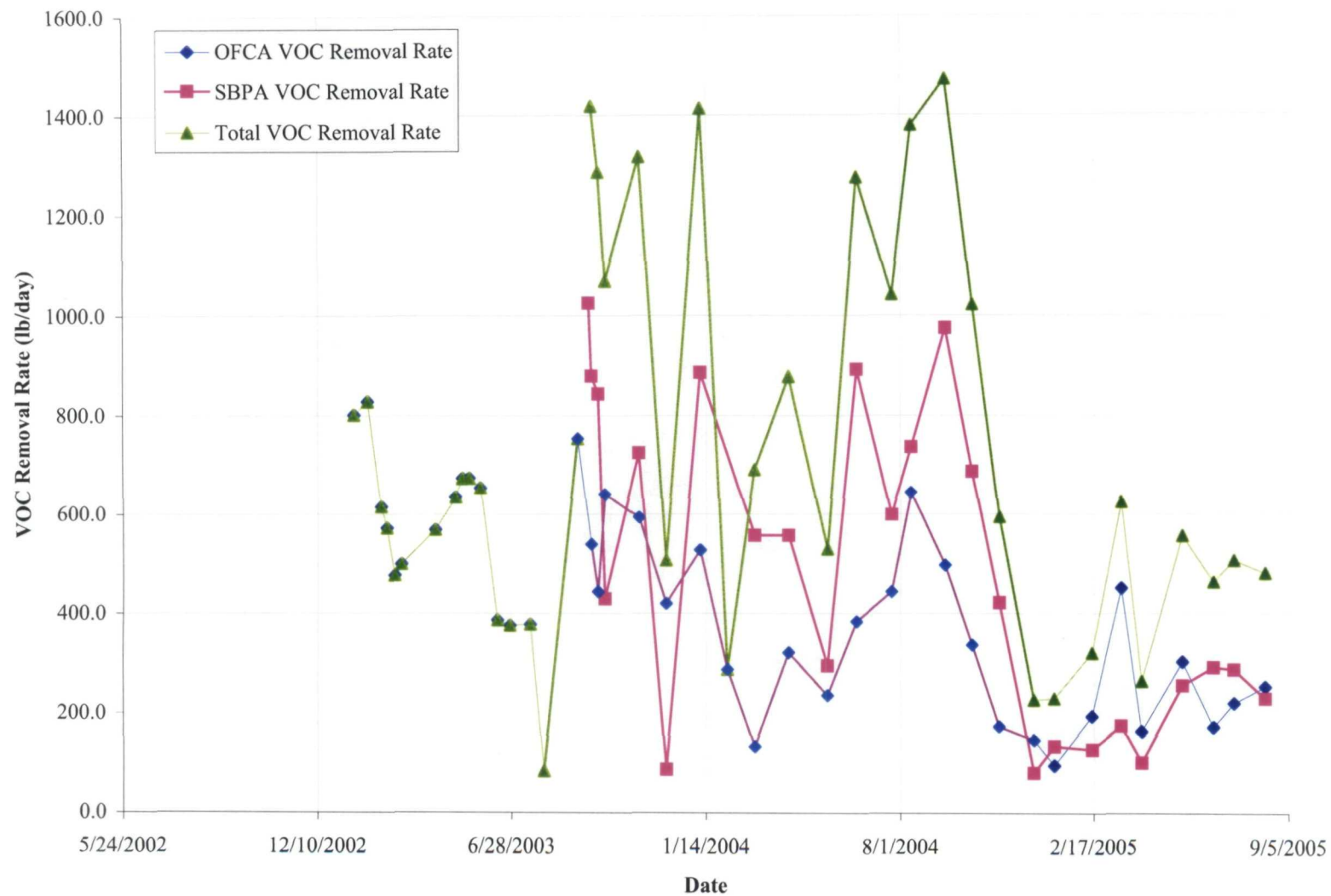
J - Result is estimated

U - below reported quantitation limit

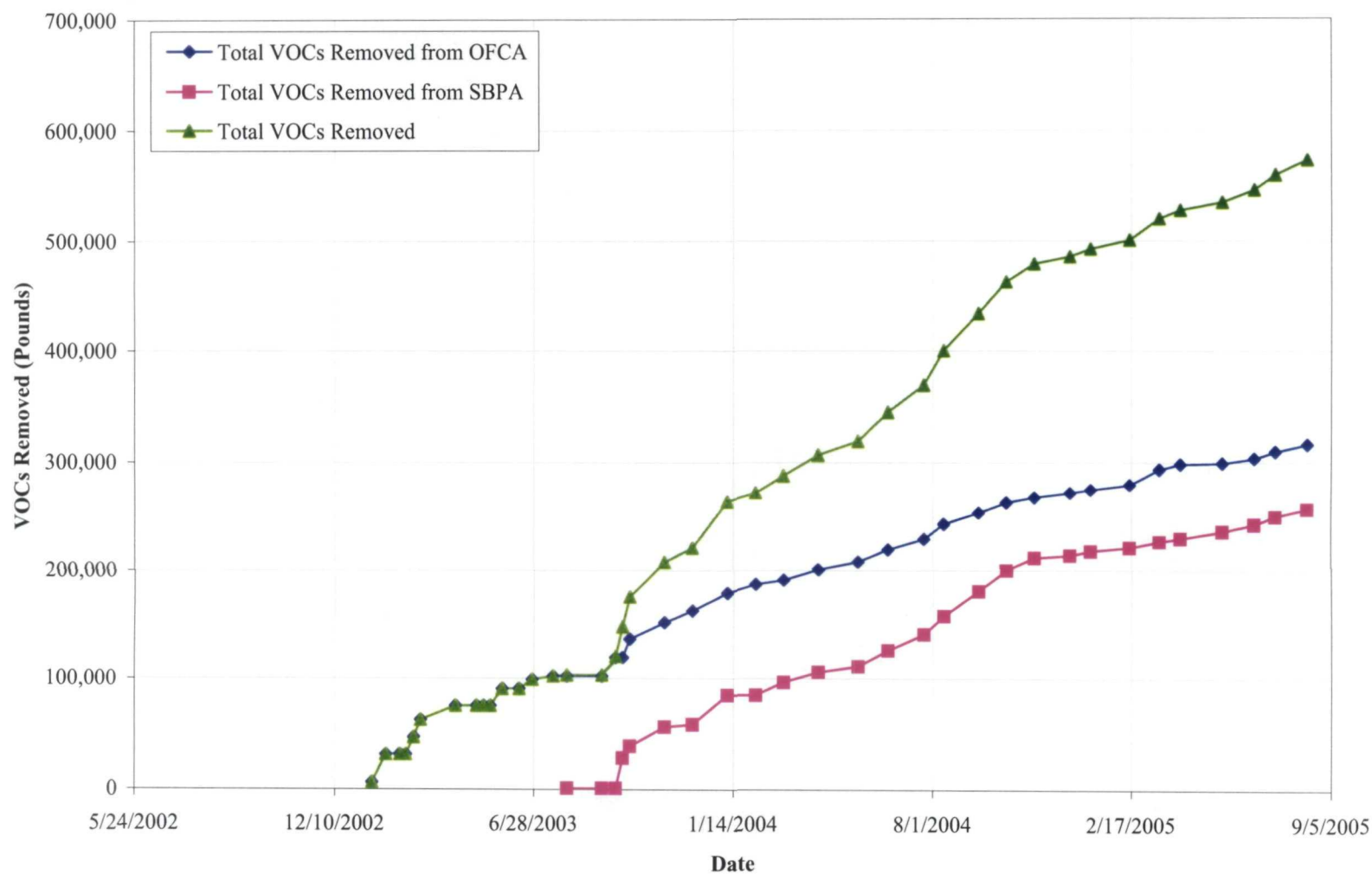
/ - Laboratory data qualifier

/ - Data validation qualifier

VOC Removal Rate American Chemical Services NPL Site, Griffith, IN



Total VOCs Removed **American Chemical Services NPL Site, Griffith, IN**



Chad Saly 09/19/2005 (67)

7:00 ARRIVED ON SITE @ ACS, Weather;
Temp 68°F; OVERCAST AND RAINING
PERIODICALLY.

TODAY'S ACTIVITIES

- GROUNDWATER ELEVATIONS
- PREPARE FOR GROUNDWATER SAMPLING.

PROVIDED LEE w/ MY H&S INFORMATION

PRESENT TODAY

Tim Kinkland	Assistant
Lee ORosz	MWH
Amy Clare	MWH
Justin Finner	MWH
Lesley Powers.	MWH

8:10 w/ Lesley Taking water elevations

@ D.C. Elevations

8:12 Picture 4 Direction 09/19/03 Camera

72 Facing North of

Amy MWH Taking water
level @ D.C.

8:20 ARRIVED @ MWS, MWSO & MWS

SS, Lesley is below approval

procedures for water elevations, monkey.

8:25 ARRIVED @ MWS.

8:53 Lesley go to measure Percepsion
levels 81-85.

(68)

Chad Saly 09/19/2005

- 8:54 I going to catch up w/ Amy and Justin in the onsite AREA.
- 9:00 Picture 18 Camera 78 Facing NE @ ONSITE AREA OF Justin taking groundwater Elevation @ Onsite Piezometers.
- 9:10 Picture 19 Camera 78 Facing west of Amy & Justin Taking Groundwater ELEVATIONS @ Pond
- 9:27 Amy & Justin are @ MWBR Taking water Elevation follow the approved procedures.
- 10:41 Amy & Justin are taking water elevation along the fence line of the Onsite AREA North Side.
- 11:18 Amy & Justin are in the Off Site AREA.
- 11:53 Leave Site for Day, The MWBR crew is finishing up Groundwater elevation and starting to Decontaminate Equipment.

Chad Saly
09/20/2005

(69)

Chad Saly 09/20/2005

- 9:50 From the office, I received the following information from Mr. Chris Daly:
- MWBR would be Developing the Lower Aquifer wells this week in conjunction with Groundwater Sampling During the week of September 19, 2005.
- DAVE Parsons would be the person performing the well Development.
- Chris Daly Phone # (312) 851 3145

Chad Saly
09/20/2005

(70)

22 Sept 05 Thu

1100 Arrive on site. Partly cloudy

warm breezy

Personnel on site

* Lee Crossy MWIT

Justin Rhine "

Amy Clare "

Tim Kirkland Austgen

David Powers MWIT

* Todd Lewis "

Mike Chonoweth Microber

* Larry Campbell BUSPE

* Prabhakar Kaseraburi IDEM

* Peter Vagt MWIT

* Kevin Adler "

* Chris Daly "

1500

Construction mtg

See notes pg 71-73

1600

Final inspection

See notes on pg 73

See notes pg 73

1640

Photo 78-1 looking W at

MWIT developing LA wells LA 15

1644

Photo 78-813 looking W at

MWIT removing pump from LA 15

Jim Campbell

(71)

1400 Construction Mtg Notes

Attendees

Noted Wt * on pg 70 - All at site - none via phone

Health & Safety - No problems since last mtg. Minimal activities other than regular plant maintenance. ACS working 7dy/wk - so more truck & personnel traffic. MWIT plans to brief ACS Staff re MWIT activities.

Groundwater Monitoring Well Sampling

Amy reported they are ahead of schedule. Should complete MW sampling by tomorrow and begin residential well sampling Friday.

Lower Aquifer Well Development

Have completed development of LA 14. Currently developing LA 15, but burnt out pump. Trying to complete using peristaltic pump. Still need to develop OW 1. Will develop EW 2 using larger capacity pump used for pump test.

Jim Campbell

(72)

Remedial Action Report

Pete distributed copies of draft RAR for review. Numerous comments & suggestions were made by those present, MWH to finalize & deliver final to EPA next week.

ISRE Enhancements

MWH reported that needed equip has arrived. Approximately 80% of needed modifications in GWTP have been made. None made in SBPA blower shed.

Look Ahead

- 3rd Rd Chem Ox Testing - 1st wk in Oct
- LA EWZ development & pumping test - 2nd wk in Oct
- Residential well & LA well sampling - next week
- SBPA ISRE upgrades - next couple of weeks
- MWH had placed wood chips on paths to MW in Wetland

JM Campbell

(73)

Next Mtg - Monthly O&M
Mtg @ MWH Office Fri Oct 7
@ 10 AM

Mtg

1500 Const. Mtg Over

1500 Begin Final Inspection.

Attendees reviewed & commented on punch list items identified on 9/24/04 Pre Final Inspection. Concluded all items had been completed satisfactorily.

1545 Mtg ended

1705 Left Site for day

~~JM Campbell~~

(74)

Chad Self 09/27/05

7:30 ARRIVED ON SITE @ ACS Facility.
Weather; Temp 56°F CLEAR AND
SUNNY.

Today's Activities-

- Observe operations of Groundwater
TREATMENT Plant.

- Residential Sampling.

8:00 Talk w/ Lee, about the Plant
operations. Today he is cleaning
one of the oxidation tanks and
receiving a load of waste.

The area also going to shut off
all Natural Gas use to Test
the Natural Gas Line from
the Valve room Collex to the
Building for leaks.

8:30 Talk w/ Amy, about Sampling

- Finish Residential wells

Monday 09/26/05.

- Have a few lower aquifer
wells Today will finish
Today.

- Monday they will Test
the Chem Ox wells
on the Southern Pointe site

Chad Self

(75)

Chad Self 09/28/05

The Chem Ox Sampling will
Run from Monday October 3 through
Wednesday October 7, 2005.

08:49 MWH is setting up on LA 15.

08:50 Picture 1 Camera 79 Facing west
@ LA 15 of MWH placing pump
in the well.

MWH is Preparing the well Collecting
water Quality Parameters w/ a
Horiba water Quality meter.

9:30 MWH is Sampling LA 15.

9:31 Next Picture 2 Camera 79
Facing NW @ LA 15 of MWH
Filling @ 20 ml VOA.

9:34 MWH (Amy Jahan) ARE Decoupling
the equipment.

09:48 MWH moving to LA 14 and installing
Pump.

09:55 Picture 3 Camera 79 Facing west
of MWH (Jahan) Collecting water
Quality parameter @ LA 14.

11:05 Sample Time @ LA 14, MWH
will also take Duplicate @
this location.
Parameters are stable currently.

Chad Self

(76)

Chad Lee 08/29/05

- 11:08 Picture 4 Camera 79 Facing
East to SE @ LA14 of MWH
filling 40ml VOA Boteles.
- 11:15 MWH is currently decontaminating
the sampling equipment.
- 11:24 MWH is mobilizing to LA13.
- 12:15 MWH is sampling LA13.
- 12:18 Picture 5 Camera 79 Facing
NE @ LA13 of MWH filling
40ml VOAs.
- 13:14 MWH BREAKING to Dump Pore water —
- 14:03 Mobilizing to West Well.
- 14:10 Purging EWOL.
- 15:20 MWH is sampling EWOL.
- 15:31 MWH is Pickup equipment and I
am leaving.

~~Chad Lee
08/29/05~~



Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 78 Photo #9
 Date: 09-19-05 Time: 0812
 Photographer: Chad Gailey
 Description: Photo facing north showing Amy taking
 water level readings at MW10C.



Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 78 Photo #10
 Date: 09-19-05 Time: 0900
 Photographer: Chad Gailey
 Description: Photo facing northeast showing Justin taking
 groundwater level measurements at onsite
 piezometer near north fence line.



Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 78 Photo #11
 Date: 09-19-05 Time: 0910
 Photographer: Chad Gailey
 Description: Photo facing west showing Amy and Justin
 measuring water level in pond.



Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 78 Photo #12
 Date: 09-22-05 Time: 1640
 Photographer: Larry Campbell
 Description: Photo facing west showing MWH
 developing LA15 well. Note new wood
 chips placed on pathway to access wells.



Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 78 Photo #13
 Date: 09-22-05 Time: 1644
 Photographer: Larry Campbell
 Description: Photo facing west showing MWH personnel removing the development pump from LA15. Development water stored in plastic containers behind well.



Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 79 Photo #1
 Date: 09-27-05 Time: 0850
 Photographer: Chad Gailey
 Description: Photo facing west showing MWH placing pump in well LA15 to purge the well prior to chemical sampling of the lower aquifer groundwater.



Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 79 Photo #2
 Date: 09-27-05 Time: 0931
 Photographer: Chad Gailey
 Description: Photo facing northwest showing MWH
 filling 40 mL VOA vial with water from
 LA15.

Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 79 Photo #3
 Date: 09-27-05 Time: 0955
 Photographer: Chad Gailey
 Description: Photo facing west showing MWH collecting
 water quality parameters at LA14.



Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 79 Photo #4
 Date: 09-27-05 Time: 1108
 Photographer: Chad Gailey
 Description: Photo facing east showing MWH filling 40 mL VOA vial at LA14.



Site: American Chemical Service, Inc.
 Proj. #: 44728 AES [46526 RAC]
 Roll: 79 Photo #5
 Date: 09-27-05 Time: 1218
 Photographer: Chad Gailey
 Description: Photo facing northeast showing MWH filling 40 mL VOA vials at LA13.